AMENDMENTS IN THE CLAIMS:

1. (Previously Presented) A recording and reproduction apparatus, comprising:

a reading section for reading first data including video and audio data, and second data including video and audio data, from an information recording medium;

a first buffer section for temporarily accumulating the read first data;

a second buffer section for temporarily accumulating the read second data;

a first decoding section for outputting first decoded data including video and audio data generated by decoding the accumulated first data;

a second decoding section for outputting second decoded data including video and audio data generated by decoding the accumulated second data;

a first setting section for setting a read finish point of the first data;

a second setting section for setting a read start point of the second data; and

a control section for calculating a first time period, from a start point of a seek operation of the reading section from the read finish point to the read start point until the first decoding section completes output of the first decoded data, and a second time period, from the start point of the seek operation until the second decoded data is allowed to be output by the second decoding section; and comparing a length of the calculated first time period and a length of the calculated second time period.

2. (Original) A recording and reproduction apparatus according to claim 1, wherein the calculated first time period includes a time period which is obtained by subtracting a time period, required for reading data from a read start point of the first data to the read finish point of the first data, from a time period obtained by dividing a data amount from the read start point of the first data to the read finish point of the first data by a bit rate corresponding to the first data.

3. (Original) A recording and reproduction apparatus according to claim 1, wherein:

the first data includes a plurality of data portions between a read start point of the first data and the read finish point of the first data,

the plurality of data portions are each associated with a bit rate; and

the calculated first time period includes a time period which is obtained by subtracting a time period, required for reading data from the read start point of the first data to the read finish point of the first data, from a time period which represents a sum of a plurality of time periods, the plurality of time periods being obtained by dividing a data amount of each of the plurality of data portions by a bit rate corresponding to each of the plurality of data portions.

4. (Original) A recording and reproduction apparatus according to claim 3, wherein the bit rate associated with an m'th data portion among the plurality of data portions is different from the bit rate associated with an n'th data portion among the plurality of data portions, where m is an integer and n is an integer different from m.

5. (Original) A recording and reproduction apparatus according to claim 1, wherein:

the first data includes a plurality of data portions between a read start point of the first data to the read finish point of the first data, and

the calculated first time period includes a time period from when one of the plurality of data portions is input to the first decoding section until the first decoding section outputs decoded data which is generated by decoding the one of the plurality of data portions.

6. (Original) A recording and reproduction apparatus according to claim 5, wherein:

the first buffer section includes a track buffer section and a VBV buffer section, and

the calculated first time period includes a time period in which one of the plurality of data portions is accumulated in the VBV buffer section.

7. (Original) A recording and reproduction apparatus according to claim 1, wherein:

the first data includes a plurality of data portions from a read start point of the first data to the read finish point of the first data,

each of the plurality data portions is associated with a bit rate,

the first buffer section includes a track buffer section and a VBV buffer section,

where the calculated first time period is TA, TA is expressed by

$$TA = \Sigma(V(i)/VdV(i)) - \Sigma(TR(i) + a(i) \times Ts) + TdlyA$$

where:

V(1) is a data amount of an i'th data portion among the plurality of data portions where i is an integer,

VdV(i) is a bit rate associated with the i'th data portion,

TR(i) is a time period required for reading the i'th data portion,

a(i) is a number of defective ECC blocks present in an area in the information recording medium where the i'th data portion is recorded,

Ts is a time period required for skipping one ECC block, and

TdlyA is a time period representing a sum of a time period, in which one of the plurality of data portions is accumulated in the VBV buffer section, and a time period from when the one of the plurality of data portions is input to the first decoding section until the first decoding section outputs decoded data which is generated by decoding the one of the plurality of data portions.

8. (Original) A recording and reproduction apparatus according to claim 1, wherein the calculated second time period includes:

a time period required for a seek operation of the reading section from the read finish point to the read start point, and

a time period from when at least a portion of the second data is input to the second decoding section until the second decoding section outputs decoded data which is generated by decoding the at least a portion of the second data.

9. (Original) A recording and reproduction apparatus according to claim 8, wherein the calculated second time period includes a time period in which the at least a portion of the second

data is accumulated in the second buffer section.

10. (Original) A recording and reproduction apparatus according to claim 5, wherein the calculated second time period includes:

a time period required for a seek operation of the reading section from the read finish point to the read start point, and

a time period from when at least a portion of the second data is input to the second decoding section until the second decoding section outputs decoded data which is generated by decoding the at least a portion of the second data.

11. (Original) A recording and reproduction apparatus according to claim 10, wherein the calculated second time period includes a time period in which the at least a portion of the second data is accumulated in the second buffer section.

12. (Original) A recording and reproduction apparatus according to claim 1, wherein the calculated second time period includes:

a time period required for a seek operation of the reading section from the read finish point to the read start point, and

a time period required for pre-decoding processing for obtaining prescribed data which is used for decoding data corresponding to the read start point of the second data.

13. (Original) A recording and reproduction apparatus according to claim 1, wherein where the calculated second time period is TB, TB is expressed by

$$TB = Tf + Tb + TdlyB + Tin$$
where:

Tf is a time period required for a seek operation
of the reading section from the read finish point to the
read start point,

Tb is a time period required for reading data which
is readable during a period from the start point of the seek
operation until data corresponding to the read start point
is read,

TdlyB is a time period representing a sum of a time
period, in which at least a portion of the second data is
accumulated in the second buffer section, and a time period
from when the at least a portion of the second data is input
to the second decoding section until the second decoding
section outputs decoded data which is generated by decoding
the at least a portion of the second data, and

Tin is a time period required for pre-decoding
processing for obtaining prescribed data which is used for
decoding data corresponding to the read start point of the
second data.

14. (Original) A recording and reproduction apparatus according to
claim 7, wherein where the calculated second time period
is TB, TB is expressed by

TB =Tf + Tb + TdlyB + Tin

where:

Tf is a time period required for a seek operation
of the reading section from the read finish point to the
read start point,

Tb is a time period required for reading data which
is readable during a period from the start point of the seek
operation until the data corresponding to the read start
point is read,

TdlyB is a time period representing a sum of a time
period, in which at least a portion of the second data is

accumulated in the second buffer section, and a time period
from when the at least a portion of the second data is input
to the second decoding section until the second decoding
section outputs decoded data which is generated by decoding
the at least a portion of the second data, and

Tin is a time period required for pre-decoding
processing for obtaining prescribed data which is used for
decoding data corresponding to the read start point of the
second data.

15. (Original) A recording and reproduction apparatus according to
claim 1, further comprising a writing section for writing,
in the information recording medium, at least one of, at
least a portion of the first data and at least a portion
of the second data, wherein:

when determining that the length of the calculated
first time period is shorter than the length of the calculated
second time period, the control section controls the writing
section so as to change a recording position, in the
information recording medium, of at least one of, at least
a portion of the first data and at least a portion of the
second data, such that the length of the first time period
is greater than or equal to the length of the second time
period.

16. (Original) A recording and reproduction apparatus according to
claim 15, wherein the control section controls the writing
section so as to change the recording position of one of
the at least a portion of the first data and the at least
a portion of the second data, which has a smaller data amount.

17. (Original) A recording and reproduction apparatus according to
claim 15, wherein:

the first data includes first audio data and first
video data;

the second data includes second audio data and second
video data; and

the control section controls the writing section such
that the first audio data and the second audio data are recorded
on the information recording medium adjacently to each other,
and such that the first video data and the second video data
are recorded on the information recording medium adjacently
to each other.

18. (Original) A recording and reproduction apparatus according to
claim 1, wherein the information recording medium is an
optical medium.

19. (Original) A recording and reproduction apparatus according to
claim 1, wherein the information recording medium is a
semiconductor memory medium.

20. (New) A recording apparatus for recording on an information
recording medium at least one of first data and second data
to be reproduced by a reproduction apparatus, the reproduction
apparatus including:

a reading section for reading the first data and the
second data from the information recording medium;

a first buffer section for temporarily accumulating
the read first data;

a second buffer section for temporarily accumulating
the read second data;

a first decoding section for outputting first decoded
data generated by decoding the accumulated first data; and

a second decoding section for outputting second
decoded data generated by decoding the accumulated second

data;

the recording apparatus comprising:

a first setting section for setting a read finish
point of the first data;

a second setting section for setting a read start
point of the second data; and

a control section for calculating a first time period,
from a start point of a seek operation of the reading section
from the read finish point to the read start point until
the first decoding section completes output of the first
decoded data, and a second time period, from the start point
of the seek operation until the second decoded data is allowed
to be output by the second decoding section; and comparing
a length of the calculated first time period and a length
of the calculated second time period.

21. (New) A recording apparatus according to claim 20, further
comprising a writing section for writing, in the information
recording medium, at least one of, at least a portion of
the first data and at least a portion of the second data,
wherein the control section controls the writing section
so as to write in the information recording medium at least
one of, at least a portion of the first data and at least
a portion of the second data, such the length of the first
time period is greater than or equal to the length of the
second time period.

22. (New) A recording apparatus according to claim 21, wherein:
the first data includes first audio data and first
video data;

the second data includes second audio data and second
video data; and

the control section controls the writing section such

that the first audio data and the second audio data are recorded on the information recording medium adjacently to each other, and such that the first video data and the second video data are recorded on the information recording medium adjacently to each other.

23. (New) An editing apparatus for editing at least one of first data and second data recorded on an information recording medium to be reproduced by a reproduction apparatus, the reproduction apparatus including:

a reading section for reading the first data and the second data from the information recording medium;

a first buffer section for temporarily accumulating the read first data;

a second buffer section for temporarily accumulating the read second data;

a first decoding section for outputting first decoded data generated by decoding the accumulated first data; and

a second decoding section for outputting second decoded data generated by decoding the accumulated second data;

the editing apparatus comprising:

a first setting section for setting a read finish point of the first data;

a second setting section for setting a read start point of the second data; and

a control section for calculating a first time period, from a start point of a seek operation of the reading section from the read finish point to the read start point until the first decoding section completes output of the first decoded data, and a second time period, from the start point of the seek operation until the second decoded data is allowed to be output by the second decoding section; and comparing

a length of the calculated first time period and a length of the calculated second time period.

24. (New) An information recording medium having first data and second data recorded thereon to be reproduced by a reproduction apparatus, the reproduction apparatus including:

a reading section for reading the first data and the second data from the information recording medium;

a first buffer section for temporarily accumulating the read first data;

a second buffer section for temporarily accumulating the read second data;

a first decoding section for outputting first decoded data generated by decoding the accumulated first data; and

a second decoding section for outputting second decoded data generated by decoding the accumulated second data;

wherein:

a read finish point is set for the first data,

a read start point is set for the second data,

the first data and the second data are arranged such that a length of the first time period, from a start point of a seek operation of the reading section from the read finish point to the read start point until the first decoding section completes output of the first decoded data, is greater than or equal to a length of second time period, from the start point of the seek operation until the second decoded data is allowed to be output by the second decoding section.

25. (New) A recording and reproduction method, comprising the steps of:

reading first data and second data from an information

recording medium;

temporarily accumulating the read first data;

temporarily accumulating the read second data;

outputting first decoded data generated by decoding the accumulated first data;

outputting second decoded data generated by decoding the accumulated second data;

setting a read finish point of the first data;

setting a read start point of the second data; and

calculating a first time period, from a start point of a seek operation from the read finish point to the read start point until output of the first decoded data is completed, and a second time period, from the start point of the seek operation until the second decoded data is allowed to be output; and comparing a length of the calculated first time period and a length of the calculated second time period.

26. (New) A recording method for recording on an information recording medium at least one of first data and second data to be reproduced by a reproduction apparatus, the reproduction apparatus including:

a reading section for reading the first data and the second data from the information recording medium;

a first buffer section for temporarily accumulating the read first data;

a second buffer section for temporarily accumulating the read second data;

a first decoding section for outputting first decoded data generated by decoding the accumulated first data; and

a second decoding section for outputting second decoded data generated by decoding the accumulated second data;

the recording method comprising the steps of:

setting a read finish point of the first data;

setting a read start point of the second data; and

calculating a first time period, from a start point of a seek operation of the reading section from the read finish point to the read start point until the first decoding section completes output of the first decoded data, and a second time period, from the start point of the seek operation until the second decoded data is allowed to be output by the second decoding section; and comparing a length of the calculated first time period and a length of the calculated second time period.

27. (New) A recording method according to claim 26, further comprising the step of writing, in the information recording medium, at least one of, at least a portion of the first data and at least a portion of the second data, such that the length of the first time period is greater than or equal to the length of the second time period.

28. (New) A recording method according to claim 27, wherein:

the first data includes first audio data and first video data;

the second data includes second audio data and second video data; and

the step of writing includes the step of:

recording at least one of the first audio data and the second audio data on the information recording medium such that the first audio data and the second audio data are adjacent to each other, and

recording at least one of the first video data and the second video data on the information recording medium such that the first video data and the second video data are adjacent to each other.

29. (New) An editing method for editing at least one of first data
     and second data recorded on an information recording medium
     to be reproduced by a reproduction apparatus, the reproduction
     apparatus including:

            a reading section for reading the first data and the
     second data from the information recording medium;

            a first buffer section for temporarily accumulating
     the read first data;

            a second buffer section for temporarily accumulating
     the read second data;

            a first decoding section for outputting first decoded
     data generated by decoding the accumulated first data; and

            a second decoding section for outputting second
     decoded data generated by decoding the accumulated second
     data;

            the editing method comprising the steps of:

            setting a read finish point of the first data;

            setting a read start point of the second data; and

            calculating a first time period, from a start point
     of a seek operation of the reading section from the read
     finish point to the read start point until the first decoding
     section completes output of the first decoded data, and a
     second time period, from the start point of the seek operation
     until the second decoded data is allowed to be output by
     the second decoding section; and comparing a length of the
     calculated first time period and a length of the calculated
     second time period.